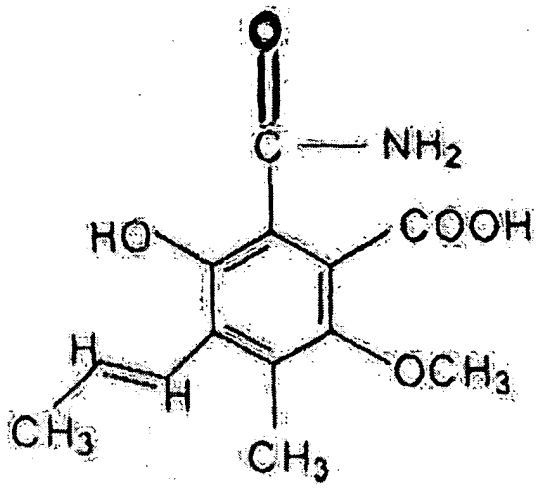
CLAIMS

1. A bioactive compound isolated from the culture of *Aspergillus Niger,* said compound having a molecular formula $C_{13}H_{15}NO_5$ with molecular structure 1:



Formula 1

2. The compound according to claim 1, wherein the molecular structure 1 having molecular formula $C_{13}H_{15}NO_5$ is 2-amido, 3-hydroxy, 4-propene, 5-methyl, 6-methoxy benzoic acid.
3. The compound according to claim 1, wherein said compound is soluble in an organic solvent selected from the group consisting of etanol, methanol, ethyl acetate and dimethyl sulphoxide.
4. The compound according to claim 1, wherein said compound is sparingly soluble in chloroform and hexane, but insoluble in water.
5. The compound according to claim 1 wherein said compound is soluble in aqueous alkaline solution selected from sodium bicarbonate, sodium carbonate and potassium bicarbonate and potassium carbonate and sodium hydroxide, lithium hydroxide and potassium hydroxide.
6. The compound according to claim 1 wherein said compound having the physical characteristics as given below:

   Nature: yellow amorphous powder.

   Melting Point: 253^0C

   λ_{max} nm (ε) in methanol: 235(20,700),
   292 (11,600),
   358 (4,400)

IR: 3499, 1657,2994 cm^{-1}.

Molecular formula: $C_{13}H_{15}NO_5$

EI-MS m/z:265 (M^+)

263 [M^+ -2H, 60%]

235 [M^+-(CH_3-CH-), 45%]

207 [235-(CH_3-C_{Ar}, 30%]

163 (207-CO_2,, 49%)

161 [100%]

99 [45%]

81 [37%]

^{1}H NMR spectra (δ, ppm):

2.04 (3H, d, J= 6.6 Hz, $C\underline{H}_3$-CH=CH-)
6.61 (1H, dq, J= 16.4 Hz, 6.9 Hz, CH_3-C<u>H</u>=C)
6.69 (1H, d, J= 16.4 Hz, HC=C<u>H</u>-Ar)
2.02 (S) (3H, s, Ar-$C\underline{H}_3$)
3.43 (S) (3H, s, Ar-OCH_3)
10.3 (Ar-O<u>H</u>)
11.5 (Ar-COO<u>H</u>)

^{13}C NMR spectra (δ, ppm):

CH_3	15.0	=C-C_{Ar}	167
=CH	122	-COOH	161
=CH	134	C_{Ar}-O-CH_3	149.5
-CH_3	15.0	C_{Ar}-OH	148
C_{Ar}-CH_3	117	$CONH_2$	168

7. A pharmaceutical composition comprising a bioactive compound of molecular formula $C_{13}H_{15}NO_5$ with molecular structure 1, along with pharmaceutically accepted excipients used for treatment of 13- Lipoxygenase inhibition and having free radical scavenging activity in subjects.
8. A pharmaceutical composition according to claim 7, wherein said composition is used to treat asthma, hypersensitivity, psoriasis, inflammatory conditions and complications arising out of diabetes.
9. The pharmaceutical composition according to claim 7, wherein the pharmaceutical excipients are selected from the group consisting of carriers, colorants, flow modifiers and stabilizers.

10. The pharmaceutical composition according to claim 7, wherein the excipients used are in the suitable amounts ranging between 0.001-0.99wt%.

11. The pharmaceutical composition according to claim 7, wherein said composition is used in the form of oral, parental, nasal, topical, buccal and ocular.

12. The pharmaceutical composition according to claim 7, wherein the subject is selected from mammals.

13. A process for the isolation of bioactive compound having a molecular formula $C_{13}H_{15}NO_5$ with molecular structure 1, said process comprising the steps of:

(a) isolating the strain CFR-W-105 from Aspergillus niger V. Teigh from honey bee wax;

(b) propagating the strain obtained from step(a) on a Potato Dextrose Agar medium and incubating for 4 days at 30^0C;

(c) inoculating with a slant of step (b) into seed liquid medium contained in Erlenmeyer flask;

(d) incubating the liquid medium of step (c) in Erlenmeyer flask at 30 ^{0}C on a rotary shaker at 250 rpm to obtain the seed culture;

(e) transferring the culture of step (d) into Erlenmeyer flasks containing wheat bran, mineral acid, sulfates and incubated for 5 days at 30^0C to obtain fermented wheat bran;

(f) treating the fermented wheat bran of step (e) with an organic solvent for two hours to obtain an organic solvent extract;

(g) separating the organic solvent extract of step(f) from the wheat bran by cheese cloth filtration;

(h) drying the organic layer of step (g) over anhydrous sodium sulfate and concentrating under reduced pressure to obtain a solid;

(i) suspending the solid of step (h) in an organic solvent and centrifuging to obtain a residue;

(j) drying the residue of step (i) to obtain an orange solid;

(k) dissolving the solid of step(j) in an alcoholic solvent;

(l) treating the solution of step(k) with active charcoal, filtering; and

(m) concentrating the filtrate under reduced pressure to obtain compound having a molecular formula $C_{13}H_{15}NO_5$ having molecular structure 1, as yellow amorphous powder.

14. The process according to claim 13 wherein the seed liquid medium is selected from Czapex solution agar for Carbon source and Czapex solution agar replacing sodium nitrate for nitrate source.

15. The process according to claim 13 wherein the mineral acid used for flask fermentation in step (e) is hydrochloric acid.

16. The process according to claim 13 wherein the organic solvent used in step (f) is selected from the group consisting of dichloromethane, chloroform, ethylacetate, methylisobutyl ketone and preferably ethylacetate.

17. The process according to claim 13 wherein the organic solvent used for suspending the residue in step (i) is chloroform.

18. The method of treating subjects with pharmaceutical composition comprising a bioactive compound of molecular formula $C_{13}H_{15}NO_5$ along with pharmaceutically accepted excipients used for treatment of 13- Lipoxygenase inhibition and having free radical scavenging activity.

19. The method according to claim 18 wherein said composition is used to treat asthma, hypersensitivity, psoriasis, inflammatory conditions and complications arising out of diabetes.

20. The method according to claim 18 wherein said compound having 13-lipoxygenase and crude rat lens aldose reductase inhibitory activity.

21. The method according to claim 18 wherein the subject is selected from mammals.

22. The method according to claim 18 wherein the IC_{50} value of the compound against purified soybean lipoxygenase and crude rat lens aldose reductase inhibitory activity is 79μ moles and 69 μ moles respectively.

23. The method according to claim 18 wherein ED_{50} value of the composition for free radical scavenging activity is 66 μM.